

Seacoast Camera Club


Prepare Digital Image Projector File

February 24, 2010

The New England Council of Camera Clubs (NECCC) is now accepting digital image files for interclub competitions. These digital image files are limited to the XGA digital projector size, which is 1024 x 768 pixels. The size limit is to ensure reasonable sized image files for transmission, eliminate the necessity of automatic scaling for projection, and for the preparation of web safe images for display.

The file SCC.atn contains two Photoshop® actions. One is designed to create image files for digital projection, and the other to reduce the image file size for safe posting on the web. It is suggested that you read about actions in the Photoshop® User Guide.

INSTALLATION

1. Download the file **SCC.atn**^{1/} to your computer, or retrieve from the email attachment folder^{2/}.
2. Launch Photoshop
 - a. Select the actions pallet^{3/}.
 - b. Click on the round  button in the upper right corner.
 - c. From the drop down menu, select Load Actions...
 - d. From the load window, navigate to the folder containing SCC.atn.
 - e. Open the file to install the action set SCC^{4/}.

PROJECTOR IMAGE FILE

This action will take any digital image file and enable the user to create a NECCC compliant digital projector image file. It also assigns the web standard 72 dpi as the image resolution. The resulting image file is saved as JPEG, level 8 compression, and baseline optimization by default. The process is interactive so that you can verify and make necessary adjustments in cropping and

¹ This document is available on the club website FAQ page, but I could not find the action itself.

² Use your normal procedure for retrieving attachments for use on your computer.

³ If "Actions" is not visible in the pallet windows, it may be selected from the menu bar from the "Window" drop down menu.

⁴ If you already created an action set named SCC, you will now have two sets. You can either copy the actions from one set to the other, or rename the action file prior to, or after loading it in Photoshop.

resampling to achieve the desired results. The action is manually invoked for each file to be processed.

Be aware that if your image is not an exact multiple of the XGA 4:3 aspect ratio in landscape orientation, the resulting image file will not fill the projector screen. Also note that portrait orientation pictures will be less than full screen. The NECCC documentation requires that all competition image files be completely contained within the projector format. For competition purposes, automatic image scaling to fit the projector format is not allowed.

The action has been generalized for any image file. Therefore, it may contain prompts for user actions you may not need to perform for any specific file. You may edit the action and turn off actions that never pertain to the way you work your images. The presumption is that you are deriving the projector file from a master image which may contain features, (such as layers and alpha channels), that cannot be incorporated into a JPEG file.

Create a Digital Image File

1. From the actions pallet, expand the SCC action by clicking on the ► to the left of SCC.
2. Highlight the Action "Projector Image File"
3. Click on the "Play Selection Button", ►, at the bottom of the pallet.
4. The action runs with a series of prompts, (Stops), that provide instructions for the process. Read the message and take the appropriate response. The stops are in two general forms.
 - a. **Mandatory Stop**
 - i. User must click on Stop and perform some function and then resume the action.
 - ii. To resume the action, click on the "Play Selection Button", ►.
 - b. **Stop with Continue Allowed.**
 - i. May provide information for the next step which would be an interactive command. Click on continue or [Enter] to resume. Informative only stops generally have "Continue" in the message text.
 - ii. May pose a question regarding the current state of the transformation. Examine the image and:
 - (1) Continue if no adjustments are necessary.
 - (2) Click on Stop and perform the necessary user controlled function. Resume the action by clicking on the "Play Selection Button", ►.

5. Interactive commands allow you to adjust the default parameters to the requirements of the current image file. Just fill in the appropriate values based on the guidelines from the preceding stop message.
6. Title Stop:
 - a. Resample Image for Digital Projection
 - b. Select Active Image, or Read from Source Folder.
 - i. Continue if desired source image is not on screen.
 - ii. Stop if desired image is on screen, but not the active image.
 - (1) Make the desired image, 'active'.
 - (2) Resume.
7. Interactive Open Menu
 - a. Navigate to the appropriate folder and select the desired image; Click OK to resume.
 - b. Cancel if desired image is on screen and active; No file opened, but the action resumes.
8. Alpha Channel Stop: *(No alpha channels in JPEG files)*
 - a. "Delete All Alpha Channels"
 - b. The Channels pallet is displayed.
 - i. Continue if there are no alpha channels.
 - ii. Stop and delete any alpha channels, do not delete layer masks; resume.
9. Copyright & Owner ID stop. *(Generally not allowed for competition)*
 - a. Continue if there is no visible copyright, owner id, or watermark.
 - b. Stop and remove or disable visible id information; Resume.
10. Cropping Stop Message
 - a. Digital Projectors are Landscape 4:3 Aspect Ratio.
 - b. Accept Entire Image, Crop for Best Display, or Select Best 4:3 Aspect Ratio Crop.
 - i. Continue selects the entire image
 - ii. Stop; use the Rectangular Marquee Tool and make a selection; Resume.
 - iii. Do Not use the Crop Tool.
11. Resample Stop *(Information fir the Image Size Menu)*
 - a. DIGITAL SLIDE: Landscape 1024 x 768 pixels.
 - b. IF (WIDTH > 1024) THEN SET WIDTH = 1024.
 - c. Continue
12. Interactive Image Size *{Image size*
 - a. If (Width > 1024) Set 1024 *{cannot exceed*
 - b. If (Height > 768) Set 768 *{either dimension.*
13. Interactive Unsharp Mask *(Touch up sharpening)*
 - a. Click on OK if it looks good.
 - b. Use preview and adjust parameters as may be necessary.
 - c. To cancel: Enter Amount(1) and click on OK. DO NOT USE THE CANCEL BUTTON.

14. Save Stop
 - a. Save as per Club Naming Conventions
 - b. Continue

(Information for next step)

15. Interactive Save As Menu
 - a. Navigate to the receiving folder.
 - b. Assign the file name as per current club conventions.
 - c. The default save is JPEG, level 8, Baseline optimized
 - d. Toggle preview button to see the compression effect on screen.
 - e. If discernable artifacts appear on screen, raise the quality level.
 - f. Click OK when satisfied.
 - g. Cancel Stops the Action.

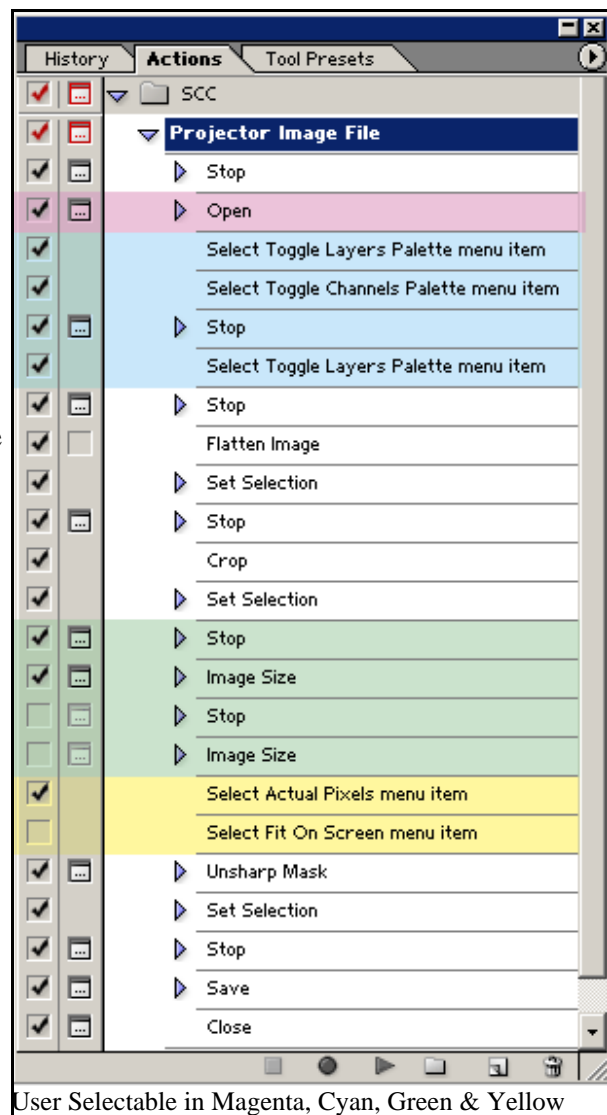
User Modifiable Action Items

The action has been generalized to work for all image files. It therefore, may contain options that are not pertinent to the way you operate. It is possible to selectively activate or de-activate certain action items to be more compatible with your operations^{5/}.

Magenta highlight. This action is an open file dialog box. If you don't need to open a file, then this item can be unchecked. This means that the image to reduce must already be open and ready to edit.

Cyan highlight. If you never use Alpha Channels, this set of action items may be unchecked. They are a reminder to delete an image file component that cannot be included in a JPEG file.

Green highlight. This is the actual image resample to fit within the projector format. It consists of two paired entries. For each pair, the Stop supplies a reminder message to validate the pixel dimensions, and the Image Size performs the resample up/down.



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Expand the action by clicking on the triangle, ►, next to the action name. Then check or uncheck commands as appropriate.

The upper pair, (on by default), resizes the digital image by setting the height to 768 pixels. The user must examine the width and reduce to 1024 pixels if required.

The lower pair, (off by default), resizes the digital image by setting the width to 1024 pixels. The user must examine the height and reduce to 768 if required.

Depending on the type of source images you normally process, you may find one of the two more convenient to use. Just check and uncheck as appropriate for your situation.

Yellow highlight. These actions resize the image on screen prior to sharpening. The best view for user control is the entire picture at 100% zoom. However, small monitors may not be able to show the entire image along with the command dialog and pallet windows. In that case, uncheck "Select Actual Pixels..." and check "Select Fit On Screen..."

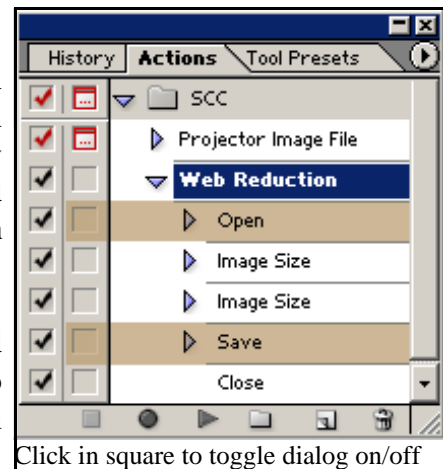
WEB REDUCTION

This is a fully automated action designed to reduce any digital image file to ½ the original dimensions, for posting on the web^{6/}. For example, a 1024 x 768 image file is reduced to 512 x 384 pixels. The action may be run as a batch and apply to all files in a directory, or may be run singularly as needed.

Using the Web Reduction Action

This action reduces any digital file to ¼th of its original size and assigns the web standard resolution of 72 dpi. Files are saved in JPEG format, level 3 compression, and Baseline optimized by default. It is designed to operate as a batch operation and reduce all files in a folder. It can be run interactively in which case you are presented an Open Menu and a Save As Menu.

1. Batch: Batch: Select File ⇨ Automate ⇨ Batch... ⇨ and fill in menu items as appropriate. Be sure to specify the source and target folders. The Open and Save dialog boxes are normally off.



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The web can be considered the Wild Wild West. You can consider any valuable image you place out there as fair game for anyone to use without your knowledge or permission. Therefore, it's best to reduce your web display images to the minimum quality needed for monitor display, but not for any other use. This action attempts to do just that. Not only is the image file reduced in size, the JPEG quality is low, level 0-3, such that JPEG artifacts are just below the threshold of visibility when viewed on screen. Never ever post a high quality image on a website.

2. Single use or prompts: Expand the action and activate the dialog for the Open and Save steps. The Open and Save dialog options must be on when the pallet "Play Selection Button" is used.